

Field Report

Everglades National Park

■ **1.0 Summary**

Located at the end of the Florida peninsula, the Everglades National Park (NP) preserves one of the most unique ecosystems in North America. As the largest continuous sawgrass prairie, the Everglades provides habitats for numerous subtropical and migratory animal species and opportunities for people to experience wildlife and recreation. The mission of the Park is to preserve the unique ecosystem of the Everglades while providing an environmentally-based recreational experience for visitors.

The annual visitation to the Park is approximately one million visitors, the majority of whom come between December and April. There are four main areas of the Park that are open to visitation including the Coe Visitor Center entrance near Homestead, Florida, Shark Valley off U.S. Highway 41, Everglades City on the gulf coast, and Chekika in the East Everglades. Each entrance offers recreational opportunities such as boating, canoeing, camping, fishing, hiking, and biking.

The two main transportation concerns the Park faces are the limited ability to provide additional parking at the Shark valley entrance or to provide transit opportunities for potential employees. At Shark Valley, on-site parking is frequently full and visitors park along U.S. 41 creating hazardous conditions for pedestrian/vehicle conflicts. The Park's desire to have a diverse workforce is limited by the access opportunities from residential areas in the area to the Park entrance and through the Park.

Three feasible alternatives are suggested to assist the Park in meeting its goals, while providing a safe and enjoyable visit to the Everglades. Feasible alternatives include a shuttle system at Shark Valley from an off-site parking area (coordinated with the neighboring Miccosukee Indian Tribe), a vanpool service for employees from south Miami and the Keys, and an on-demand shuttle service from the southernmost Metrorail stop in south Miami.

■ **2.0 Background Information**

2.1 Location

The Everglades NP encompasses the entire tip of the Florida Peninsula, including Florida Bay (see Figure 1), and is accessible from both the east and west coasts of Florida. The Park is approximately 30 miles from Miami and 10 miles from Homestead and Florida City, Florida. Dade, Monroe and Collier counties share the distinction of being part of the Everglades.

Figure 1. View of Florida Bay

From the west coast of Florida, the Everglades NP is accessible from Everglades City, south of Naples and Ft Myers, Florida. Other entrances into the Park include Shark Valley, off the Tamiami Trail (Highway 41), and Chekika, on the east side of the Everglades. Big Cypress National Preserve and the Miccosukee Indian Reservation border the Park.

2.2 Administration and Classification

The Everglades NP was established in December 1947 by President Harry S. Truman at Everglades City. The Wilderness areas of the Park were established in 1978. Additions to the Park boundaries include the east Everglades area in 1989 and the Chekika site, or east Everglades dedicated to the Park by the state of Florida in 1991. Just over 300 acres of the Park are under joint jurisdiction with the Miccosukee Tribe Reservation.

The Everglades Park Headquarters is located on the east side of the Park at the Coe Visitor Center, near Homestead and Florida City, Florida. Supplemental visitor centers include the Gulf Coast Visitor Center in Everglades City and the Flamingo Visitor Center at Florida Bay. Almost 300 people work for the Park, not including concessionaire employees.

The Dry Tortugas NP, 68 water miles from Key West, is managed through the Everglades NP.

2.3 Physical Description

Including land and water, the Everglades covers over 1.5 million acres, almost 1.3 million of which are designated wilderness. The Everglades NP is the largest continuous stand of sawgrass prairie (see Figure 2) and the only subtropical preserve in North America. It also provides habitats for numerous subtropical and migratory animal species, including 13 endangered species.

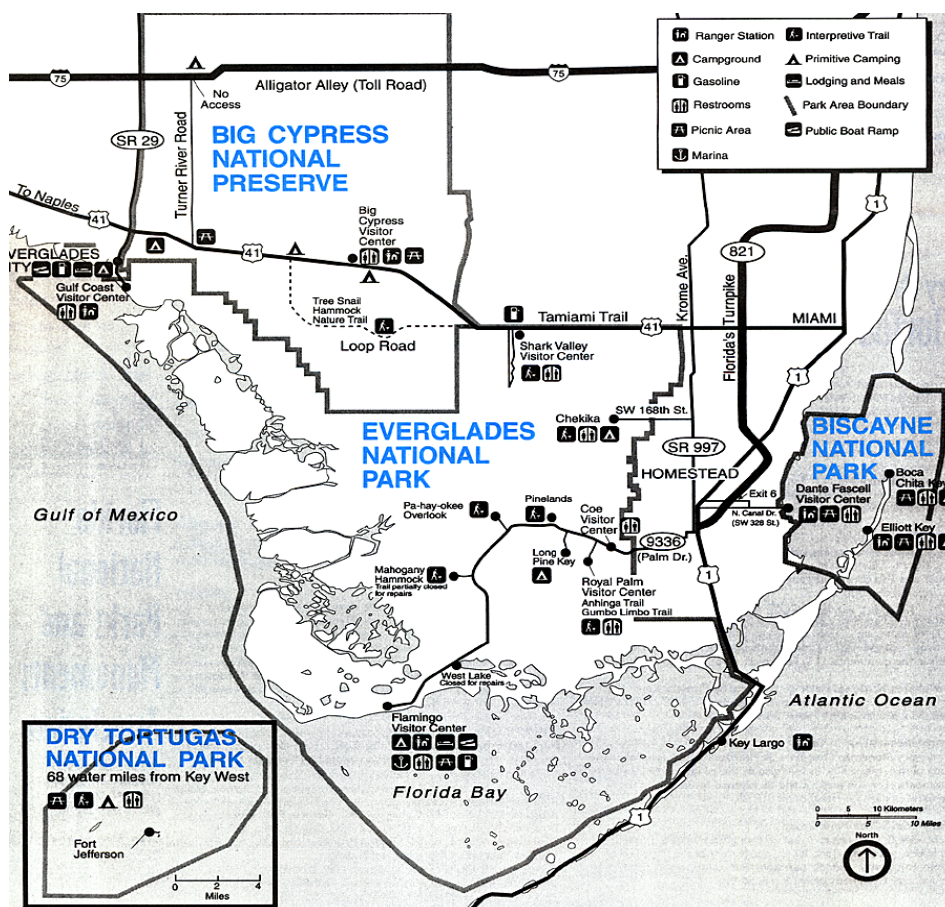
Figure 2. Trail at Royal Palm (Main Part of Park)



As shown in Figure 3, the Park is accessible from four main land-based entrances including:

- Coe Visitor Center, off Route 9336 from Homestead, Florida;
- Chekika, in east Everglades off State Route 997;
- Shark Valley, off Highway 41 Tamiami Trail; and
- Everglades City, off State Road 29 on the west coast.

Figure 3. Map of Everglades National Park



Within the Park there are 82 miles of surfaced roads, 156 miles of trails (including canoe trails), five miles of surfaced trails, and one mile of elevated boardwalk trails. Other facilities in the Park include three campgrounds, 48 designated backcountry campsites, 301 buildings, three fee collection stations and three concessionaires. The concessionaires offer amenities such as lodging, camping, food, boat and tram tours, and boat, canoe and bicycle rentals. The five main employment centers with the Park include the main Park Office Headquarters at the Coe Visitor Center (see Figure 4), the Flamingo Visitor Center (offices and concession), the Dan Beard Research Center, Gulf Coast Visitor Center and concession, and the Shark Valley Visitor Center (offices and concession).

Figure 4. Parking at Coe Visitor Center



2.4 Mission and Goals of the National Park

The mission of the Park is to preserve the unique ecosystem of the Everglades while providing an environmentally-based recreational experience for visitors. The goals of the Park include:

- Provide Everglades NP visitors a variety of opportunities to experience the Park's unique subtropical wilderness values such as solitude, tranquility, undeveloped expansive wetlands, and the abundance and diversity of wildlife and plants;
- Foster an appreciation of Everglades NP and its role in the greater Everglades ecosystem by promoting better understanding of: the intermixing of subtropical and temperate plants and animal communities; the wetlands wilderness landscape; the role of water, fire, and other natural processes; the effects of human activities; and the Park's international significance;
- Restore the hydrological conditions within Everglades NP to that which was characteristic of the natural ecosystem prior to human intervention, including water quality, quantity, distribution, and timing;

- Ensure the preservation and restoration of a land and water base in Everglades NP and the greater Everglades ecosystem to allow natural processes, functions, cycles, and biota to continue or be reestablished;
- Provide the opportunity for the Seminole and Miccosukee Tribes to exercise their existing rights to the extent and in such a manner that does not conflict with the purposes of the Park; and
- Maintain a diverse, motivated, empowered and professional workforce in order to become a more responsive, efficient, and accountable organization.

2.5 Visitation Levels and Visitor Profile

The annual visitation of the Park is approximately one million visitors. The peak visitor season is between December and April, when the temperature is cooler and mosquitoes less voracious. Of the four main entrances to the Park, the Coe Visitor Center entrance and Everglades City are the most visited with 300,000- 400,000 visitors per year.

Activities available for visitors vary by entrance. The entrance just outside Homestead, which includes the Coe Visitor Center, offers opportunities for day and overnight activities. In addition to the displays and programs at the Visitor Center, and the approximately 40-mile drive through the Everglades from the Visitor Center to Flamingo (see Figures 5 and 6), visitors may hike on boardwalk trails, bike, canoe, fish, boat, camp and take tours through the wilderness to view wildlife and experience the Everglades ecosystem. Once in Flamingo, visitors may use the facilities offered by the concessionaire (including the lodge and boat and canoe rental), or use their own equipment to gain access to Florida Bay.

**Figure 5. Facilities at Flamingo/
Florida Bay**



Figure 6. Gulf Coast Tour Boat



The Shark Valley entrance is one of the most popular areas for visitors to experience the Everglades through a guided tour. This entrance to the Park is used frequently by east coast Florida residents as a local access to the Everglades.

The Everglades City entrance offers visitors an opportunity to experience a narrated boat tour of Ten Thousand Islands and coastal mangrove, or rent canoes. The Chekika entrance is the newest entrance into the NP and provides camping and picnic facilities for visitors.

■ 3.0 Existing Conditions, Issues and Concerns

Growing metropolitan areas near the Everglades NP create a number of concerns for the Park. The pressure of development surrounding the Park affects the level of traffic, impacts on natural resources, and increasing visitation pressure.

3.1 Transportation Conditions, Issues and Concern

Currently, the only way to get to the Everglades NP is by private automobile or chartered bus. For the main entrance of the Park, there is ample parking and low congestion on Palm Drive into the Park. Upon entering Homestead or Florida City from the Miami area, there are two places for visitors to go: south to The Keys or west to the Everglades. In either case, visitors and employees must make their own travel arrangements. The Park does not experience traffic congestion in this area of the Park, but rather, Park employees have difficulty with long commutes from the Miami area or The Keys.

On occasion during peak season, the Royal Palm parking lot, along the main Park drive, will fill to capacity. Other places in the main Park area that have parking problems include Noble Hammock (day-trip canoe parking) and Hells Bay (wilderness campers parking). Other problems on the main Park road include visitors speeding on the return trip from Flamingo.

Concession at Flamingo

The Park also has a difficult time recruiting a diverse workforce due to the lack of public transportation to the Park Headquarters and within the main areas of the Park. Not only do employees supply their own transportation, but they are subject to high-commuting costs, without an attractive alternative. As part of the Miami-Dade transportation plan, MetroDade buses are available from Cutler Ridge Mall to Florida City via U.S. 1, but these buses do not serve the Park. The lack of transit alternatives to the Park not only discourages a diverse workforce, but also keeps the Park from being accessible to segments of the local community.

The Shark Valley tram tour, operated by concession, lasts two hours and gives visitors interpretive information while they view the wildlife of the Everglades from both the tram and an observation tower. Visitors are also able to use the Shark Valley trail by bicycle or

on foot. The trail is closed to private automobiles. Reservations are recommended, and often required during the peak season. The tram costs \$9.00 per adult and \$5.15 per child in addition to the \$8.00 per vehicle Park entrance fee. The concession at Shark Valley also rents bicycles. The Park estimates that 65 percent of the visitors to Shark Valley use the tram service, 25 percent rent or bring their own bicycles, and 10 percent walk.

The popularity of the Shark Valley area, coupled with the Park's inability to provide additional parking has resulted in extremely overcrowded conditions and safety issues. Within the Shark Valley area itself, there are 135 parking spaces plus two spaces for buses and three for recreational vehicles. Although most visitors call ahead to make reservations, the popularity of the midday tram tours (see Figure 7) have prompted the concessionaire to fill these tours on a first come-first served basis only. This procedure results in visitors arriving hours before a tour is available.

Figure 7. Shark Valley Trams



With no vehicular access beyond the small, crowded parking lot, Shark Valley Road becomes congested which requires the Park to provide staff to tell new arrivals to turn around and find alternative parking. Although the parking on the Park property is full, visitors Park along Highway 41 in the state right-of-way creating a dangerous situation for pedestrian and vehicular conflict.

In Everglades City, a private company with small commercial vans provides transit service from outside the Park and a few hotels offers guests transportation to the Visitor Center. Except for special events, such as the Everglades City Seafood Festival in April, there are few days where parking or congestion is a problem at this end of the Park.

In the past the Flamingo concession also operated a tram tour of the Rowdy Bend/Snake Bight areas. The tram, which ran on gravel roads, was part of an interpretive visitors experience.

3.2 Community Development Conditions, Issues and Concerns

The gateway communities to the Everglades include Homestead/Florida City, the Miccosukee Indian Reservation, and Everglades City, though the pressure of Miami's development can be felt by the resource. Homestead and Florida City are known as the gateway to The Keys and thrive more on that reputation than on the Everglades.

Regional residents from Ft. Myers and Naples, Florida frequently visit the small town of Everglades City. Although there have been plans for the expansion of the visitor facilities at the Gulf Coast Visitor Center in the past, the plans have never been implemented.

The Miccosukee Tribe, whose village and gambling establishments border the Park near the Shark Valley entrance, offers airboat rides and shopping opportunities for visitors to the area. The tribe is also in the process of developing new attractions, such as a new museum, and a 300-car capacity parking lot within walking distance of the Shark Valley Park entrance. The Park has discussed building a boardwalk from the parking lot to the entrance if Park visitors were permitted to park at the tribal lot.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

At Shark Valley, the Park is unable to expand the parking lot without filling wetlands, but it also cannot accommodate a substantial increase in visitation at this site without causing resource and visitor experience damage on the drive (see Figure 8). Secondary resource damage occurs from road residue run-off from Highway 41. The numbers of cars that park along this stretch of road exacerbate the level of run-off into the Park's water system.

Figure 8. Road to Shark Valley, Flooded After Hurricane



At the main entrance, the Park is concerned about the impact of visitors speeding on the main road. In combination with short-sight distances, speeding increases the number of road kill incidents in the Park.

Although there are very few air quality concerns in the Park, the Park staff is interested in clean-burning fuels for boats and automobiles.

3.4 Recreation Conditions, Issues and Concerns

The recreation opportunities on the refuge are limited to the edges of the Park due to the predominance of the wetlands (see Figure 9). The Park's greatest recreation concern is at Shark Valley. The Park struggles to continue to give a quality visitor experience when visitors must grapple with parking difficulties and pedestrian safety.

Figure 9. View of Everglades Boardwalk Trail



■ 4.0 Planning and Coordination

4.1 Unit Plans

The Park has initiated a General Management Plan (GMP) process for the East Everglades (Chekika) which was acquired in 1991.

4.2 Public and Agency Coordination

When the Park has issues that affect its neighbors, the staff will coordinate efforts with Big Cypress National Preserve and the Miccosukee Indians. The Park also has a representative on the water management district committee responsible for the South Florida and Everglades area.

5.0 Assessment of Need and System Options

5.1 Magnitude of Need

There are two major transportation-related needs in the Everglades NP: the parking shortage at Shark Valley and lack of transportation alternatives to major residential areas on the east side that are the source of Park employees. The parking problems at Shark Valley should be resolved in conjunction with the State with regard to illegal parking on Highway 41 and should consider the visitor capacity at Shark Valley. The current parking shortage, while undesirable, does control the number of people who are able, or who are willing, to come to Shark Valley.

The lack of alternative transportation to the Park affects the Parks' ability to attract a diverse workforce, but may also keep the Park from being competitive in a strong employment market. In the long run, both may hurt the quality of the visitor experience. In addition, the Park is limited in its ability to serve the local population without means of transportation to the Park.

5.2 Feasible Transit Alternatives

Since the Park is unable to fill any wetlands to provide additional parking at Shark Valley, it must be able to provide an alternative place to park off-site. This could entail a shuttle system from the main part of the Park, though more likely, it will entail the collaboration of the Park with a neighbor who has adequate parking facilities. A feasible transit alternative for Shark Valley would be to coordinate a shuttle system with the Miccosukee Indian Tribe and the attractions they promote.

The Park's desire to serve two types of users, visitors and employees, will challenge a small system. Service to attract a diverse employment force needs to be flexible to the needs of employees. A feasible alternative to serve employees would be a vanpool system with three vans: one for south Miami, one for the Keys, and one for reserve. The south Miami van could connect to the southernmost Metrorail stop to the Park through Homestead and Florida City. To serve visitors without transportation means, the Park could provide an on demand service from the southernmost Metrorail stop and/or a shuttle service from Homestead or Florida City to the Park. Special considerations would need to be made once visitors arrived at the Park.

■ 6.0 Bibliography

Everglades National Park brochure.

Everglades National Park, *Park Goals Resource Fact Sheet*.

Everglades National Park, *Park Purpose Resource Fact Sheet*.

Shark Valley Tram Tour brochure.

Visitor's Guide to the National Parks and Preserves of South Florida, Rainy Season 1999, Volume 10 No. 2.

■ 7.0 Persons Interviewed

Cherrie Brice, Everglades National Park

Sandy Dayhoff, Everglades National Park

William Fay, Everglades National Park

Ersell King, Everglades National Park, Maintenance mechanic

Bob Nodell, Shark Valley Tours (concessionaire)

Bill Russell, Shark Valley Tours (concessionaire)

Rick Sanchez, Shark Valley Tours (concessionaire)

Paul Stoehr, Everglades National Park

Craig Thatcher, Everglades National Park, Tamiami District Ranger/Resource and Visitor Protection

Candace Tinkler, Everglades National Park